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# **The Future of Space Exploration**

## **Turning Goals Into Reality**

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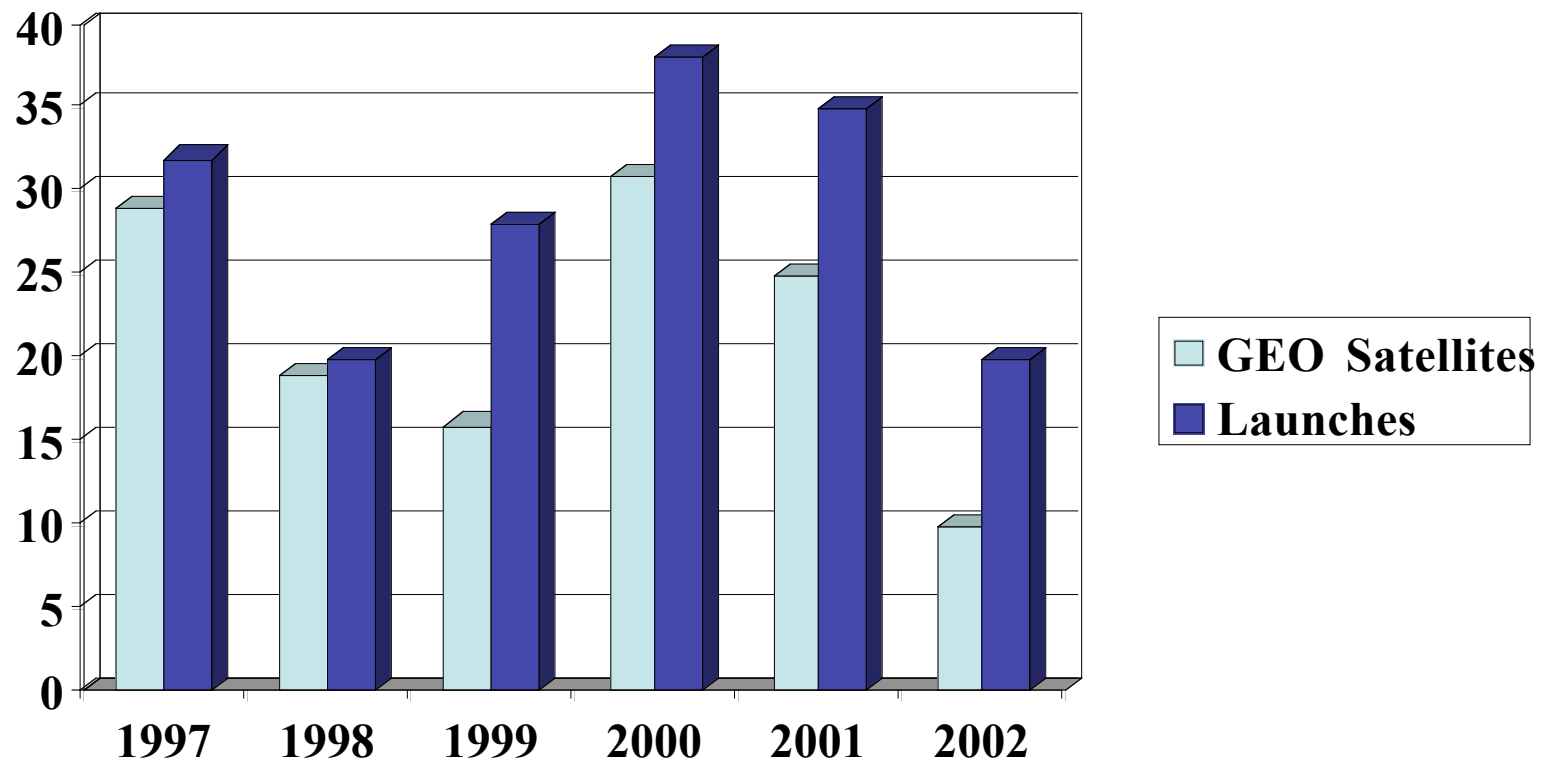


# Commission on the Future of the Aerospace Industry

- Recommendation #3. . . . That the United States create a space imperative. The Department of Defense, the National Aeronautics and Space Administration and industry must partner in innovative aerospace technologies, especially in the areas of propulsion and power. These innovations will enhance our national security, provide major spin-offs to our economy, accelerate the exploration of the near and distant universe with both human and robotic missions, and open up new opportunities for public space travel and commercial space endeavors in the 21<sup>st</sup> century.
- Recommendation #9. . . . That the federal government significantly increase its investment in basic aerospace research, which enhances US national security, enables breakthrough capabilities and foster an efficient, secure and safe aerospace transportation system. . .

# Commercial Space

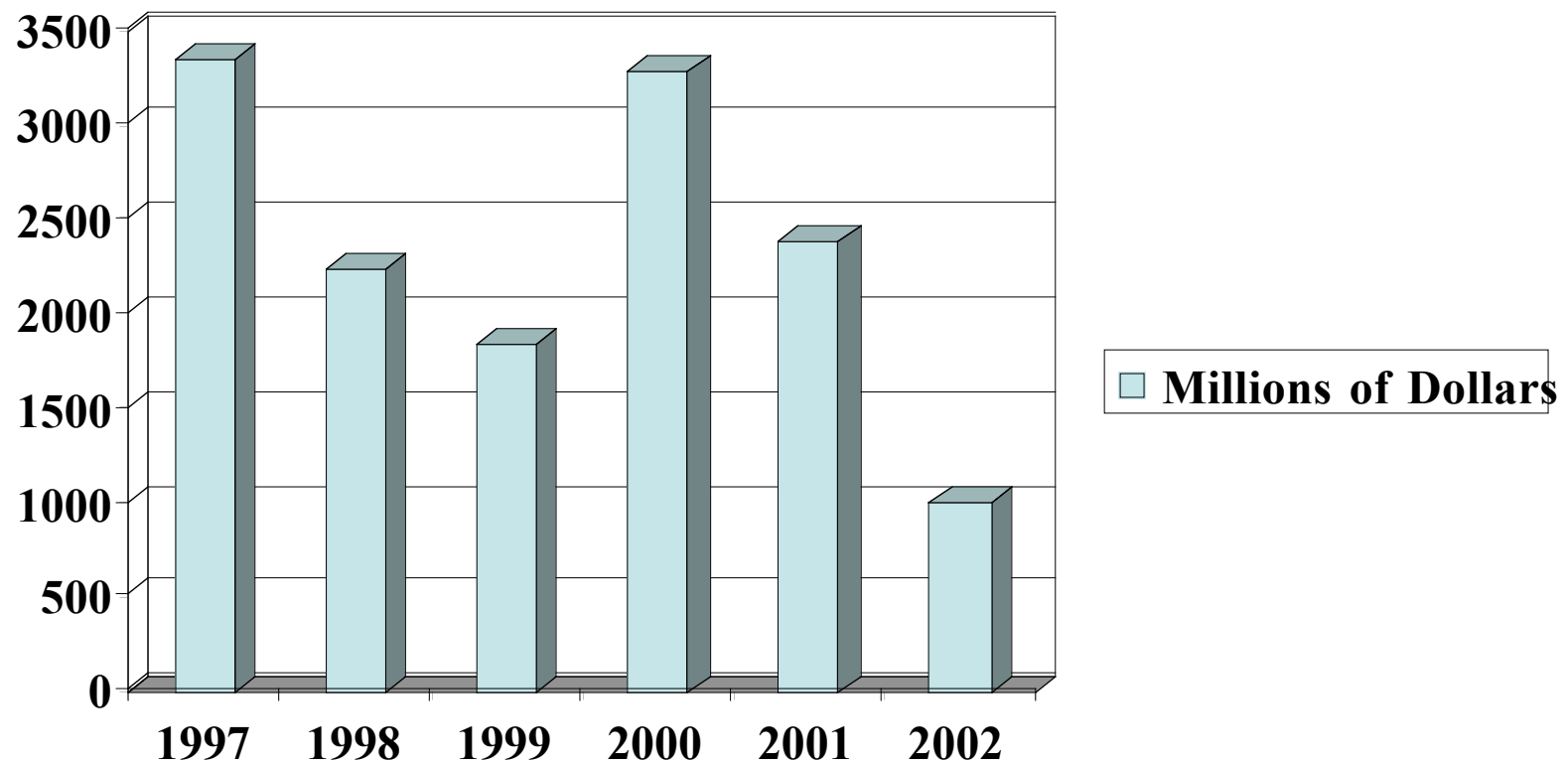
## *Worldwide Orders*



Source: Futron Corporation

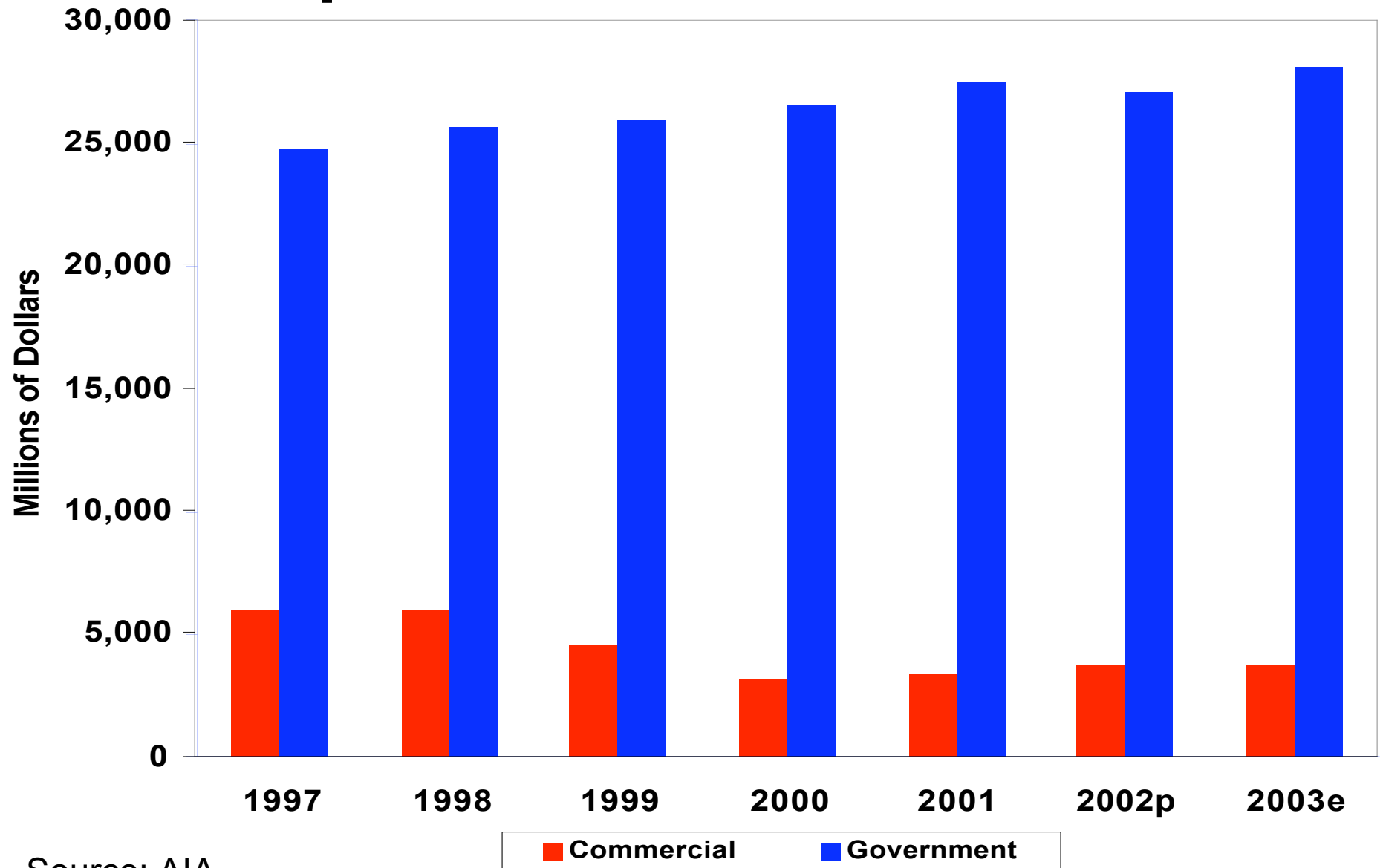
# Commercial GEO Satellites

## *Worldwide Value of Orders*

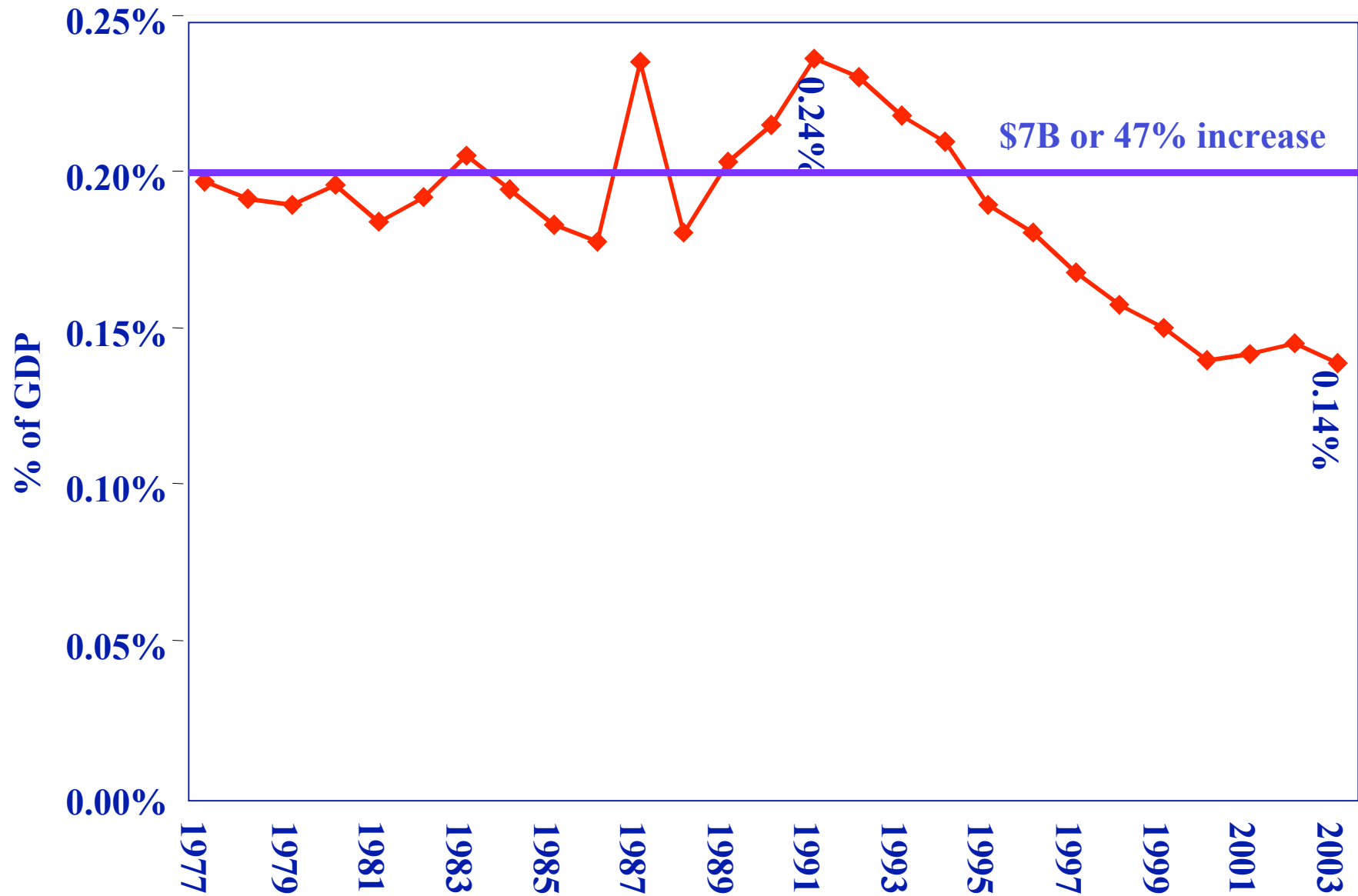


Source: Futron Corporation

# Space Product Sales - U.S.



# NASA Budget as Percentage of GDP



# National Space Transportation Policy Council Recommended *Changes*

- **NASA and DOD Roles with Respect to Expendable and Next Generation Reusable Space Transportation Systems**
- Regulation of Commercial Launch Activities by the FAA
- Launch Trade Agreements
- Orbital Debris Mitigation
- **USG Payloads On Foreign Launch Vehicles**

# National Space Transportation Policy Council Recommended *Additions*

- **Comprehensive Space Transportation Plan**
- **Investment by the USG in Space-Related S&T**
- U.S. Space Workforce/Industrial Base
- Promoting Test Program Realism and Sufficiency
- National Launch Infrastructure
- Commercial Launch Indemnification
- Industry Participation in Intl Space Launch Programs
- Acquisition Strategies